

California Institute of Technology • 4800 Oak Grove Drive, Pasadena, California 91103

12 June 1978

Dr. R.E. Vogt
California Institute of Technology
Physics, Mathematics, and Astronomy
220-47 Downs
Pasadena, California 91125

Dear Dr. Vogt:

Thank you for the information requested in my letter of 20 April 1978. I have compiled the information received from all experiments into two charts. Each chart indicates for one spacecraft the volume of Quick Look EDRs (QEDRs) requested as a function of time for the Jupiter encounter phase. Also indicated is the amount of data to be provided on each tape and the timeliness of EDR delivery.

In some cases, I have adjusted your requests to fall within one day instead of covering two days when the volume requested was less than 24 hours. The purpose of these charts is to plan and scope the capabilities required within the Ground Data System and Data Records System. A shift of 24 hours at this time should be acceptable for our planning purposes. It is my plan to update the QEDR requirements weekly during the encounter phase. It will be these weekly updates (for a one week period at a time) that will be utilized to control QEDR requests and deliveries. Please review the attached charts and advise me if I have been too liberal in the interpretation of your requests. I have presented these requirements to the Project in the "Operations Planning Group" (OPG) meeting and it is currently being evaluated.

In the same OPG meeting, I also presented a proposed EDR generation strategy for data received over Australia that exceeds the wide band data lines capability. A copy of this viewgraph is enclosed and provided for your information and comment. The intent is to obtain a strategy that would allow the fastest delivery of EDRs.



Dr. R.E. Vogt

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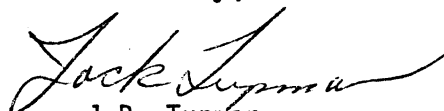
12 June 1978

Another set of charts enclosed was provided to me to illustrate the possible Deep Space Station (DSS) tracking cycles. These are the available view periods for each station as a function of time and spacecraft during the Jupiter encounter phase. The chart provides the approximate view periods and does not constitute a commitment for tracking time. These two charts should provide you an indication, when coupled with the spacecraft data return profile, of the periods of delayed data return from Australia.

During the SSG of 21 March 1978, the availability of EDR data during the observatory phase was discussed. Of concern was the 5 minutes of every 2 hours that was only available from the spacecraft tape recorder since the data will not be received in real time at the DSS. The period covered during the phase, as you remember, is 27 days. The Project position has been not to provide the data on EDRs. The SSG request to have this data provided on EDRs was again evaluated by the Project. Our Project position continues to be that the data will not be provided on EDRs because of the excessive cost associated with the extra processing that would be required within the Test and Telemetry System (TTS). However, this data will be on IDRs. These IDRs will be retained to provide the capability to generate EDRs, for specific periods, if anomalous conditions are observed.

If you have any questions or concerns, please do not hesitate to call me.

Sincerely,


J.R. Tupman

JRT:jvc

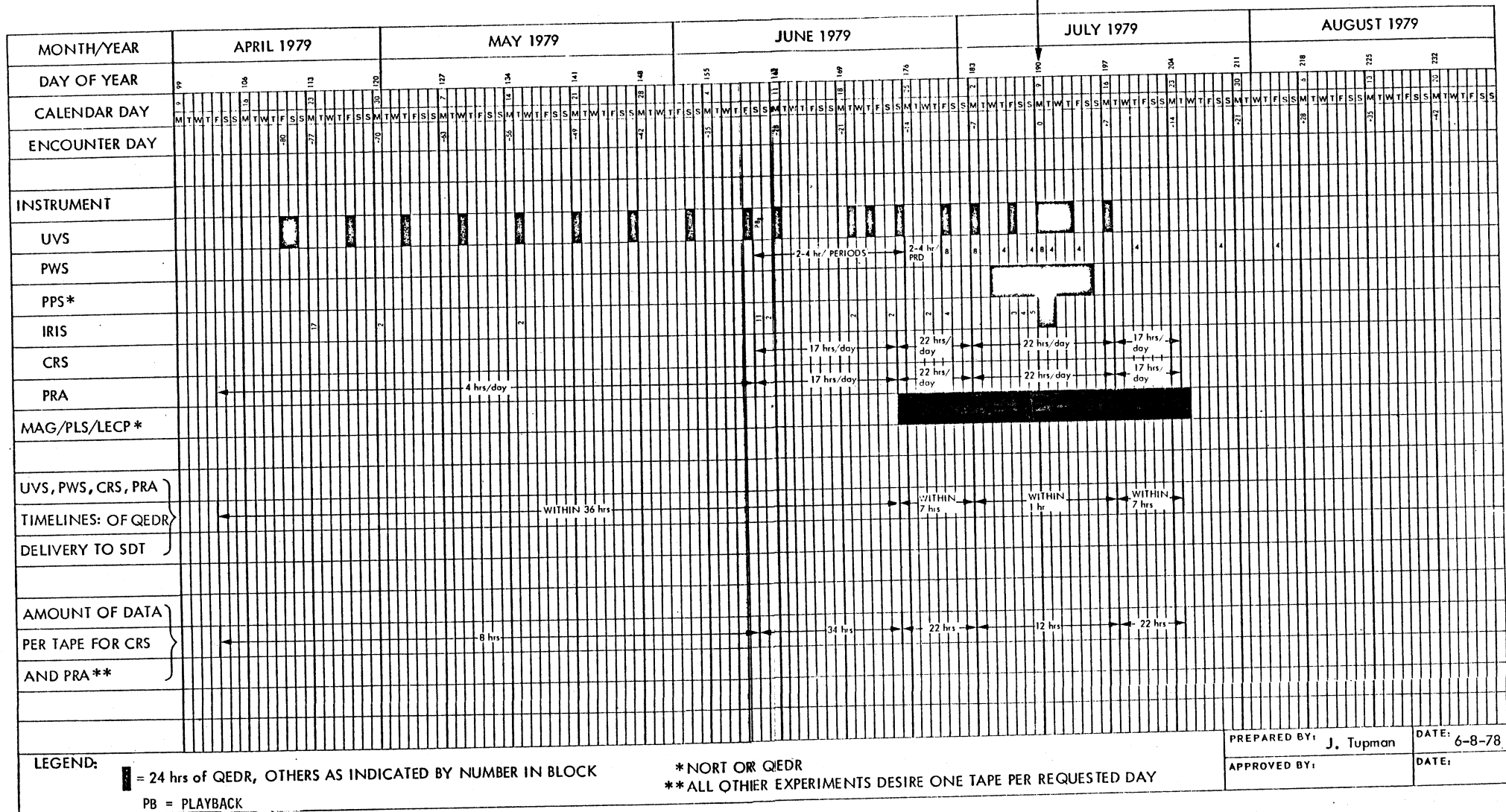
Enclosures (5)

cc:

A. Cummings (CIT)
H. Danley
H. Domchick (GSFC)
E. Franzgrote
T. Garrard (CIT)
N. Gehrels (CIT)
N. Lal (GSFC)
J. Long
J. Povlis (CIT)
E. Stone
J. Trainor (GSFC)

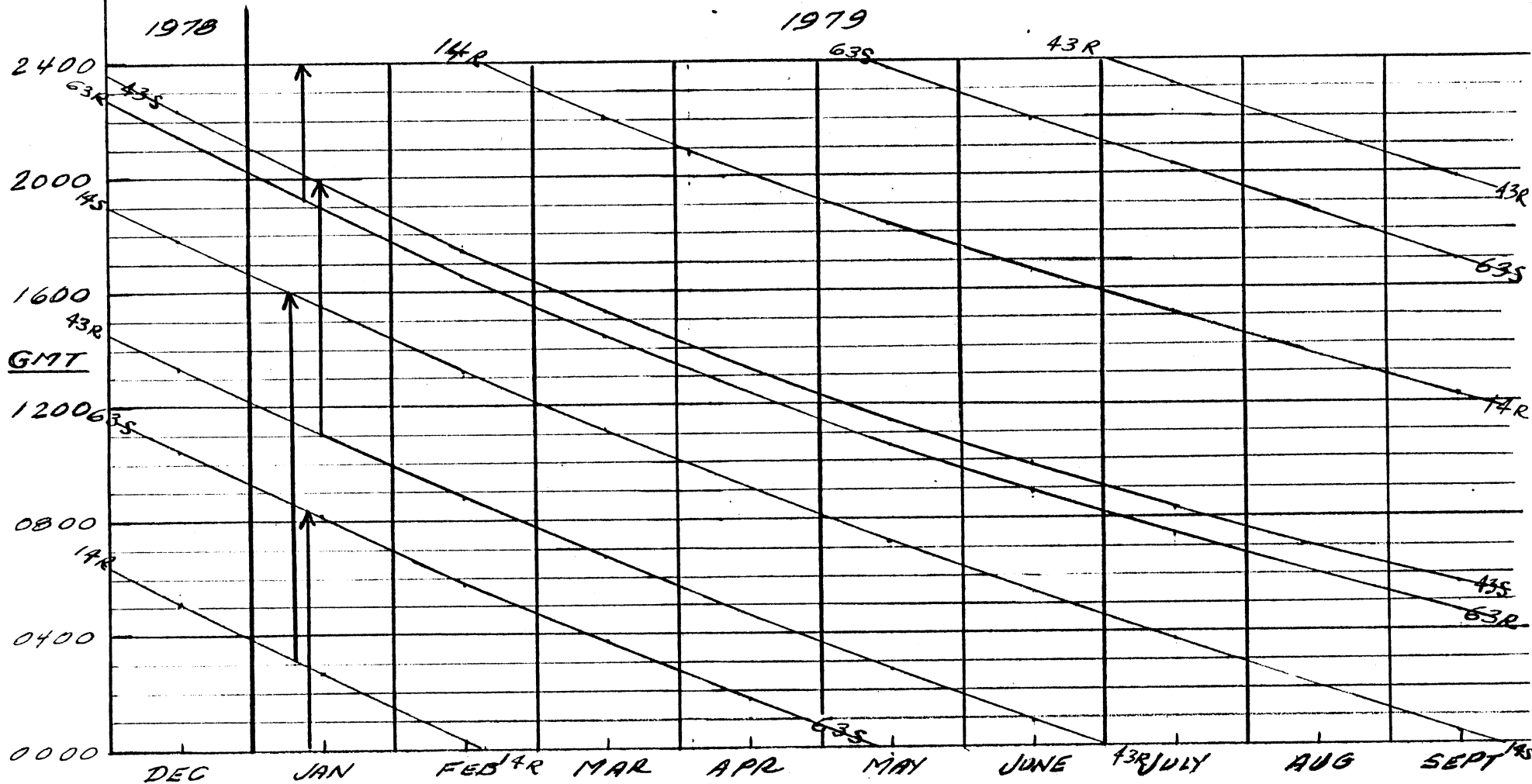
VOYAGER S/C 2

ENCOUNTER



VOYAGER 2 VIEW PERIODS

REF. NAV I.D. 7780203

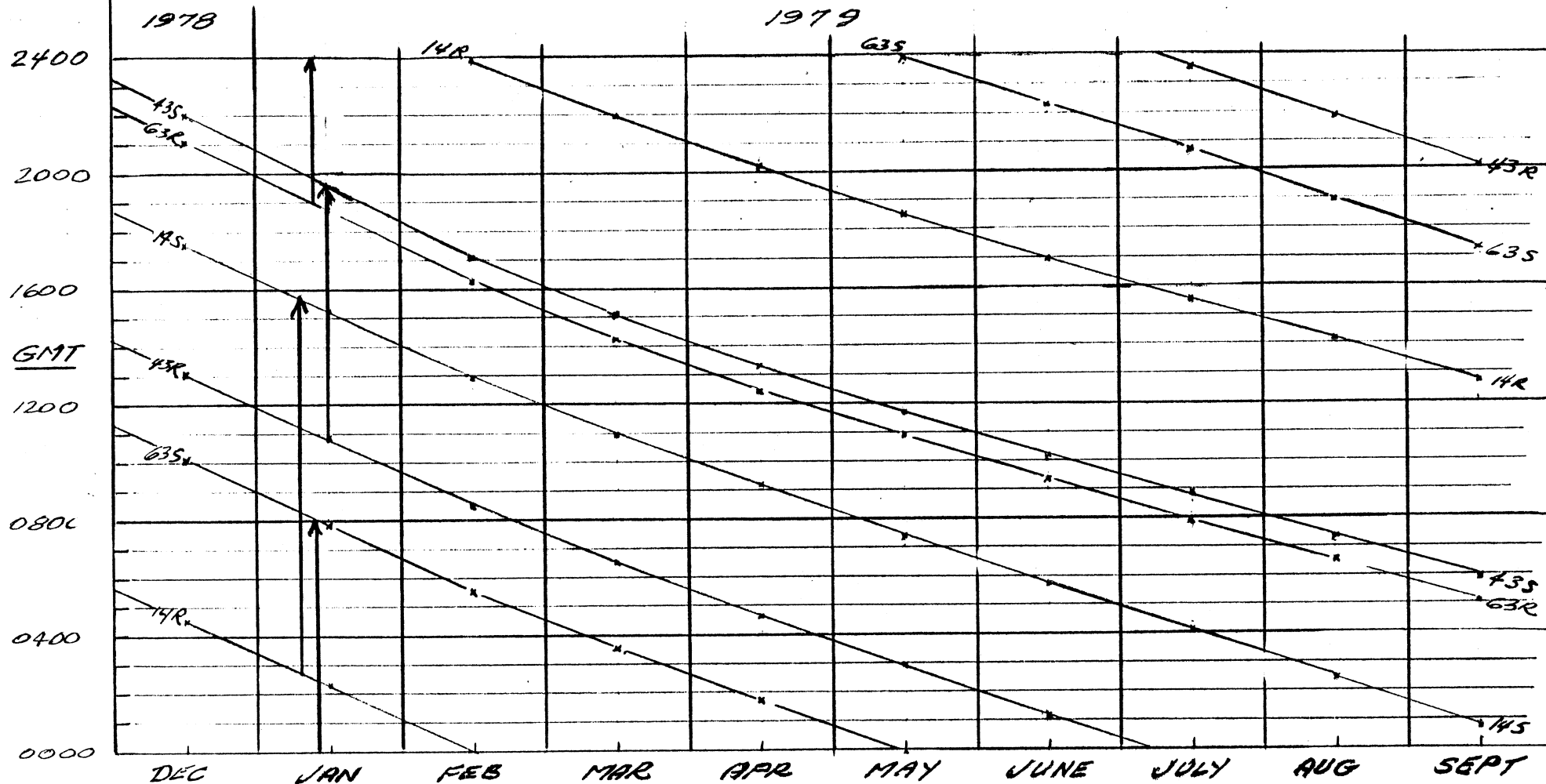


↑ Indicates view period

C. PETTINGALL
12 JUNE '78

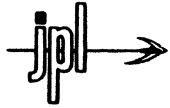
VOYAGER 1 VIEW PERIODS

REF. NAV ID T780202



↑ Indicates view period

C. PETTINGALL
7 JUNE '78



SDT PROPOSED EDR STRATEGY
FOR JUPITER ENCOUNTER

WHEN DATA CANNOT BE RETURNED TO JPL IN REAL TIME FROM AUSTRALIA

- * PRODUCE ONE EDR FOR DATA BETWEEN AUSTRALIAN PASSES
- * PRODUCE AN EDR FOR EACH AUSTRALIAN PASS

JRT
6/6/78